

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
((STATEWIDE PROJECT MANAGEMENT GROUP))

((EXAMPLE))
SCOPE OF WORK

((260 GI 262 H4699 01D
STP-053-2(40)
PAYSON-HEBER HWY (SR 260)
LITTLE GREEN VALLEY SECTION))

((June 2011))

[All sections in red and using Italic format (enclosed or not within parenthesis) are used to mark material for which the Project Manager should provide information in the scope of work with information related to his/her specific project. The material is either information which is common but not required for every project or information that is necessary on every project but is project specific and for which the design Project Manager must insert information.]

Once the Design Project Manager updates the respective sections for the project using the correct format (Non-Italic), the rest of the example information should be removed from the project scope; as well as this paragraph.

The information presented in Black lettering and using Non-Italic format represent information which is required for all contracts and should NOT be removed or modified.

Also the contract number must be inserted into the Header and the TRACS number in to the Footer.]

TABLE OF CONTENTS

SCOPE OF WORK

THIS SECTION IS PROJECT SPECIFIC. The Design Project Manager should fill out this section using his/her project information. EXAMPLE:

SECTION 100 - GENERAL INFORMATION	2.4
110 Location	2.4
120 Description	2.4
130 Purpose	2.5
140 Construction Cost	2.5
150 Organization	2.5
160 Length of Services	2.5
170 Schedule	2.5
171 Project Schedule	2.6
172 Project Schedule Updates	2.6
173 Progress Meetings	2.6
180 Responsibility Chart	2.6
190 Environmental Documents	2.6
SECTION 200 - DESIGN REFERENCES	2.6
210 Miscellaneous Reports and Studies for this project	2.6
220 AASHTO Publications	2.7
SECTION 300 - DESIGN CRITERIA	2.7
301 Supplemental Design Criteria	2.7
310 General	2.7
320 Geometry	2.7
330 Roadway	2.7
360 Drainage	2.7
370 Traffic	2.8
380 Other Features	2.8
SECTION 400 - DESIGN WORK PERFORMED BY CONSULTANT	2.8
401 Design Features	2.8
405 AASHTO Design Criteria Report	2.9
410 Location Surveys	2.9
416 Geotechnical Investigation	2.9
417 Earthwork	2.10
419 Pavement Design	2.10
420 Environmental Studies	2.10
422 Noise Analysis Technical Report	2.10
424 Archeological Testing and Recovery	2.10
425 Public Information Meetings and Public Hearings	2.11
426 Local, State and Federal Permits	2.11
429 Hazardous Materials Survey	2.11
430 Utilities and Railroad	2.11
440 Roadway Design	2.11
445 Roadway Drainage	2.12
450 Landscape Architectural Practice and Design	2.12
455 Bridge Design	2.12
460 Traffic Engineering Design	2.13

461	<i>Traffic Engineering Study</i>	2.13
462	<i>Traffic Control Plans</i>	2.13
463	<i>Intersection Lighting and Signalization</i>	2.14
464	<i>Signing Plans</i>	2.14
465	<i>Pavement Marking Plans</i>	2.14
467	<i>Composite Traffic Control Device Plan</i>	2.14
470	<i>Right-of-Way</i>	2.14
480	<i>Cost Estimates</i>	2.15
485	<i>Specifications</i>	2.15
486	<i>Special Provisions</i>	2.15
487	<i>Contracts and Specification Process</i>	2.15
SECTION 600 - POST-DESIGN SERVICES		2.16
SECTION 700 - MATERIAL FURNISHED BY ADOT		2.16
750	<i>Environmental Studies</i>	2.16
770	<i>Final Design Concept Report</i>	2.16
SECTION 1000 - CONTRACT ADMINISTRATION		2.16
1027	<i>Site Visit</i>	2.16
1050	<i>Value Analysis</i>	2.16
1060	<i>Reviews and Submittals</i>	2.16
1062	<i>Stage I Design Submittal</i>	2.16
1063	<i>Stage II Design Submittal</i>	2.16
1064	<i>Stage III Design Submittal</i>	2.17
1065	<i>Stage IV Design Submittal</i>	2.17
1066	<i>Final Submittal</i>	2.17
 APPENDICES		
A.	<i>Location Map</i>	2.18
B.	<i>Responsibility Chart</i>	2.19
C.	<i>Distribution List</i>	2.23
D.	<i>Final Cost Proposal</i>	2.25
E.	<i>Payment Report</i>	2.26
F.	<i>Evaluation Schedule</i>	2.27

SECTION 100 - GENERAL INFORMATION

NOTE: This scope of work is presented in two parts. The Project Scope of Work is contained in this section. It includes information specific to this project.

The section Dictionary of Standardized Work Tasks is presented as a section within the scope of work. It includes information that is common to consultant design contracts. The description of work tasks is presented in Dictionary of Standardized Work Tasks. Not all the work tasks described are necessary on every project.

110 Location

((The project 260 GI 269 H4699O1D, Little Green Valley section of the Payson-Heber Highway, is located on SR 260 in Gila County between the Payson City limit and the Mogollon Rim. The project limits are approximately from MP 262.7 to MP 266.2. This project is located in the Arizona Department of Transportation (ADOT) Prescott District.))

Location and vicinity maps are attached in *((Appendix A.))*

120 Description

((The Payson-Heber Highway (SR 260) is classified as a principal rural arterial highway on the National Highway System. SR260 is a two-lane highway that serves as a major commercial corridor between Phoenix and northeastern Arizona and provides access to the recreation areas both above and below the Mogollon Rim, as well as the White Mountain Lakes and Ski areas. The corridor is located within the Tonto National Forest. The posted speed limit is 55 mph.))

This project will include the following:

- A. The Design firm shall design and prepare construction plans, technical specifications, cost estimates, quantity computations and related construction documents. **All work on this project shall be in English units.**
- B. The project involves the design of proposed improvements which will *((include the reconstruction of portions of the existing two-lane roadway to a four-lane divided roadway consistent with the selected alternative in the Location/Design Concept Report (L/DCR). The design will consider construction staging, traffic control, temporary transitions and reuse of existing roadway where possible, including wildlife crossings, drainage features and reconnection of local access. The project will also include ADOT designed major Bridge structures. The design of the project includes highway landscaping, irrigation, multi-use pathways, co-ordination and design of Rest Area facilities.))*
- C. *((The design shall include and incorporate all mitigation measures identified in the final L/DCR and Environmental Impact Statement (EIS). Work that is of landscape architectural in nature may require professional expertise for the agronomic, architectural components of the projects as needed.))*

D. The team for the design effort shall include *((at a minimum, the Federal Highway Administration, Tonto National Forest, U.S. National Park Service, Gila County, ADOT Prescott District, ADOT technical disciplines and other agencies or interested stakeholders.))*

E. Provide post design services as necessary for successful construction of the project.

130 Purpose

The purpose of this project is *((to improve the capacity, public safety and operational characteristics of this segment of SR 260. This project shall remain sensitive to environmental concerns and mitigation requirements for major construction in a National Forest.))*

140 Construction Cost

((The Little Green Valley project has been approved by the State Transportation Board and is included in the five-year construction program for construction in FY 2001 at an estimated cost of \$18,100,000. Costs for utility relocation as described in the L/DCR are listed under separate items in FY 1999 at an estimated cost of \$65,000.))

150 Organization

The Arizona Department of Transportation (ADOT) retains design consultants to perform a variety of *((engineering))* services.

160 Length of Services

((This project will be designed in two phases. Phase I will progress through the Stage II design activities. Phase II will complete the preparation of the construction plans and associated documents. There may be a substantial delay between phase I and phase II. ADOT, at the appropriate time, will determine when Phase II will be performed.))

The length of service is estimated to be *((730))* calendar days *((not including the wait between Phase I and Phase II))*. This begins with the Notice to Proceed (NTP), and includes all reviews by the team and stakeholders through the award of contract.

Post design services shall be by a contract modification.

170 Schedule

The Consultant shall develop a plan for the design and pre-construction activities necessary for delivering the project in a timely manner consistent with the length of service described in Section 160. The plan shall include a list of activities, estimated duration and resources as well as a Critical Path Method (CPM) schedule and other information as appropriate.

The consultant shall provide a schedule of major project milestones *((through the completion of stage II. An additional schedule shall show the schedule of major milestones for developing the plans from Stage II through to bid advertisement.))*

171 Project Schedule

The Consultant shall provide a CPM schedule compatible to ADOT's Primavera scheduling system. It shall include the milestones/flags requested by ADOT. An initial schedule shall be submitted within *((6 weeks))* of the Notice to Proceed. The schedule submitted shall be customized to reflect the specific needs of the project. Work elements for which ADOT has responsibility shall be included in the schedule.

172 Project Schedule Updates

The consultant shall status activities in the schedule in accordance with a schedule furnished by ADOT. Changes to the schedule logic will be submitted to the ADOT Project Manager for approval. If the milestones show negative float, the Consultant shall include a narrative of corrective solutions to put the design schedule back on time for delivery.

173 Progress Meetings

The Consultant shall schedule and attend *((a regularly scheduled monthly progress meeting. The Consultant shall document the progress meeting through Meeting notes ("minutes"), which shall be distributed to the team within 10 calendar days of the meeting.))*

180 Responsibility Chart

((Appendix B)) is a chart indicating the division of responsibilities between the consultant, ADOT and other stakeholders. This chart is intended as a "checklist", in the event of conflict the written Scope of Work shall take precedence.

190 Environmental Documents

((Design features of this project shall be in accordance with the approved Final Environmental Impact Statement (EIS). All mitigation measures identified in the EIS shall be incorporated into the project design. The approved EIS will be made available to the Consultant prior to the Notice to Proceed.))

SECTION 200 - DESIGN REFERENCES

The Consultant shall refer to Section 200 of the Dictionary of Standardized Work Tasks for further information.

210 Miscellaneous Reports and Studies for this project

- A. *Location/Design Concept Report – [Date published]*
- B. *Environmental Assessment – [Date published]*
- C. *Noise Study Report [Date published]*
- D. *Wetland Evaluation Report [Date published]*
- E. *Regional Air Quality Analysis [Date published]*
- F. *Cultural Resource Report [Date published]*
- G. *Geotechnical Investigation Report [Date published]*
- H. *Reconnaissance Inventory and Preliminary Assessment of Historic SR 260 and the Payson-Heber Telephone Line. [Date published]*

220 AASHTO Publications

ADOT references and publications shall control the work, and any necessary supplementation should be provided by appropriate AASHTO and/or FHWA references. The ADOT Project Manager will provide guidance and direction.

SECTION 300 - DESIGN CRITERIA

Design of this project will be guided by the *((final L/DCR for State Route 260 Payson to Heber dated XX/XX/XX))* and the basic design criteria listed in sections 310 through 380 of this scope of work. These design criteria will serve as the basis for referencing the project design standards and guidelines referenced in Section 200.

301 Supplemental Design Criteria

The design criteria listed in Section 200 and the Project Design Guidelines may be supplemented by project design memorandums provided by ADOT during the course of the project.

310 General

- *Design Year* ((2020))
- *Design Speed* ((55 mph – minimum))
- *Pavement Design Life* ((20 years))

320 Geometry

In accordance with Roadway Design Guidelines, the following are specific criteria to be used.

- *Slope guidelines:* ((Std. C-02 Series))
- *Maximum Gradient:* ((6%))
- *Minimum Vertical Clearance:* ((16'-6"))
- *Maximum superelevation:* ((0.06 ft./ft.))

330 Roadway ((Widths))

- *Number of Traffic Lanes:* ((4))
- *Traffic Lane –* ((12 ft.))
- *Shoulder –* ((10 ft outside shoulder; 4 ft inside shoulders))
- *Median –* ((variable, refer to L/DCR))
- *Intersecting/Side Roadway Widths –* ((match existing or per approved permit))
- *Driveway and Turnout Layout –* ((Std C-06 Series))

360 Drainage

Design Frequency:

- *Cross Culverts –* ((50 years))
- *Bridges –* ((50 years))

- *Medians – ((50 years))*
- *Storm Drain – ((10 years))*
- *Channels – ((50 years))*
- *Curb and Gutter Type – ((Std. C-05 Series))*
- *Maximum Velocity – ((Evaluate erodibility of native soil))*
- *Minimum Velocity – ((Evaluate deposition of soil))*
- *Allowable Headwater – ((To within three inches of lowest elevation of top of pavement))*
- *FEMA Considerations – ((Evaluate per ADOT Roadway Design Guidelines, Section 602))*
- *Erosion Control – ((To be determined per HEC-14 and HEC-15))*
- *Pavement Drainage – ((Evaluate per HEC-12))*

370 Traffic

- *Signing Permanent ((Freeway Rural - Conventional Highway))*
- *Signing Temporary ((Traffic Control during Construction))*

380 Other Features

- *Guardrail/Barrier Type – ((Std C-10 Series))*
- *Fencing Type – ((Std C-12 Series))*
- *Cattle Guards – ((Std C-11 Series))*
- *Cattle/Game Crossings – ((per initial DCR))*
- *Retaining Walls – ((Std B-18 Series (June 1992 publication number 31-002) or alternate proprietary retaining wall systems (if appropriate)))*
- *Sound Barrier Walls – ((Std 8.01 and 8.02 Series or alternate proprietary retaining wall systems (if appropriate)))*

SECTION 400 - DESIGN WORK PERFORMED BY CONSULTANT

The Consultant shall be responsible for the design work and preparation of construction documents outlined in this section in accordance with the standard design and services listed in the Dictionary of Standardized Work Tasks. The Consultant shall perform all work in accordance with the most current policies and procedures, unless otherwise directed.

401 Design Features

The Consultant shall be responsible for the design development and the preparation of construction documents for *((a segment of new four lane divided roadway for SR 260 as specified in Sections 110 and 120. The design work will be carried to completion of Stage II documents. At that time, ADOT will determine when to go forward with further development of the project, plans and documents.))*

The design will be developed on the basis of *((the L/DCR and Environmental Impact Statement (EIS) provided by ADOT))* and the associated technical reports referenced in Section 210 of this scope.

The Consultant shall coordinate closely with the ADOT Project Manager and other members of the project team; *((this shall include coordination with SR 260 projects concurrent in development.))*

405 AASHTO Design Criteria Report

((The AASHTO design criteria were reviewed during development of the L/DCR. The results of the evaluation are summarized in the AASHTO Controlling Design Criteria Report, dated XX,XX,XX. The current basis of design does not require any design exceptions; any adjustments to the design concept will require re-evaluation and coordination with the Project Manager.))

410 Location Surveys

((The Consultant shall request and review any available survey data provided by ADOT Photogrammetry and Mapping Section and Right of Way Section.))

((The corridor is mapped for 400 feet each side of the existing highway up to the Coyote Springs Road. The Section corners are also tied up to Coyote Springs Road. No below ground features have been surveyed. The consultant will need to map several new areas: about 9,000 feet of mainline from Coyote Springs Road to the project limits at the connection with new Fain Road; about 5200 feet of the new SR89A connector from Fain Road to existing SR89A, approximately 1500 feet north on Robert Road, and approximately 500 feet south along Glassford Hill road to accurately depict the changes that have occurred.))

((The Consultant shall survey, stake, and flag the proposed roadway centerline as presented in the L/DCR a minimum of 2 weeks prior to the project kickoff meeting. Stakes and flagging shall be placed a minimum of every 100-feet and at each PT/PC. Final alignment staking shall include the proposed construction clearing limits within the Forest boundary, based on plans information so that timber clearing limits can be established. Within the boundary of the Tonto National Forest, the clearing limits will be staked at maximum 100 foot intervals. Intervals may be less than 100 foot in order that a minimum of three clearing stakes are visible to the timber crew.))

416 Geotechnical Investigation

((The Consultant shall prepare a geotechnical investigation work plan, including necessary access roads for the geotechnical work. This plan shall be submitted to ADOT Materials Section for review and approval. The approved work plan shall be submitted to the USFS and Environmental Planning Group for review and environmental clearance. Approximately 4 to 6 weeks are required for review and approval. The Consultant should plan the work such that the impact resulting from lack of environmental clearance is minimized.))

((The Geotechnical investigations by the use of borings will not proceed until resolution of the Mexican Spotted Owl study. Phase I services will be performed based upon existing surface refraction studies, provided by ADOT, and supplemental geological mapping and additional surface refraction seismic studies performed by the consultant. Surface seismic refraction studies may be performed during the Mexican Owl nesting season.))

((A Geotechnical Investigation Report shall be prepared in accordance with ADOT Materials Group guidelines to describe the investigation and summarize the results of the data collection and testing. The report shall also include, at a minimum, recommendations for earthwork factors (shrink and swell), cut and fill slope rates/stability, geologic unit locations (rock blasting, etc.), and suitability for embankment and/or aggregate.))

417 Earthwork

((Borrow and waste sites within the Tonto National Forest are not readily available. Therefore, the Consultant shall refine the earthwork concepts presented in the L/DCR to achieve balance to the extent possible. Environmental considerations are of primary concern, and therefore any balancing to be provided by changes in geometrics must be approved by ADOT. The Consultant shall prepare cross sections for the Stage II centerline alignment and present cut and fill slopes and limits, right-of-way limits, and centerline location every 100-feet. Cross sections shall be updated for the Stage III and IV submittals. Final cross sections shall be provided to ADOT C&S as part of the bid package. An earthwork summary sheet shall also be developed for each cross section submittal.))

419 Pavement Design

((Pavement design will be provided by the ADOT Materials Group, Pavement Design Section. The Consultant shall coordinate this work task and incorporate ADOT recommendations into the project design. Unit costs and quantity estimates will be provided by ADOT Pavement Design Section and shall be incorporated into the design documents by the Consultant.))

420 Environmental Studies

((An Environmental Impact Statement has been prepared for this project, dated XX/XX/XX. The Consultant shall be responsible for incorporating identified mitigation measures into the project design.))

((All design activities required to reach the Stage II (30 %) submittal may proceed concurrent with the environmental studies to be performed by this contract. Activities (i.e., geotechnical investigations, survey, etc.) that require soil or vegetation disturbance may not begin until the appropriate environmental clearance (i.e., cultural resources, hazardous materials, or biological evaluations) is issued. ADOT Environmental Planning Section, in cooperation with the affected federal, state or local agency, will issue the required clearance.))

The Consultant shall refer to Section 420 of the Dictionary of Standardized Work Tasks for further information.

422 Noise Analysis Technical Report

((A study of the present and future noise environment adjacent to the project was conducted during preparation of the EIS. No abatement is required to mitigate noise impacts. Prior to completion of stage IV final design documents, the Consultant shall review any changes in vertical or horizontal alignment to assure that predicted noise levels are not increased, that noise levels do not approach or exceed Noise Abatement Criteria (NAC), and that appropriate noise abatement criteria is implemented.))

424 Archeological Testing and Recovery

((The EIS has determined that archaeological testing and recovery will be necessary prior to construction. The Consultant shall be responsible for providing qualified personnel to perform this work in accordance with the EIS.))

425 Public Information Meetings and Public Hearings

((A public information meeting will be held for this project. The purpose of the meeting shall be to inform the public of the scope and status of the project. The consultant shall be responsible for the following tasks necessary to assist ADOT's Communication and Community Partnerships (CCP) Section in preparing and conducting each public meeting.

- 1. The consultant shall coordinate and attend one team meeting prior to the public information meeting.*
- 2. Prepare meeting information in the form of graphics, cost estimates, and other material appropriate to describe the project to the public.*
- 3. Identify and secure a meeting location and schedule meeting*
- 4. Prepare draft advertisement for the public information meeting*
- 5. Prepare handout materials (including sign-in sheets, comment sheets, and ancillary materials) not to exceed two hundred (200) copies at ten (10) pages per copy.*
- 6. Attend the meeting at an advisory level to answer questions, and if requested by ADOT, give a presentation.*

ADOT will be responsible for publishing legal notices as needed and providing liability insurance for each public meeting.))

426 Local, State and Federal Permits

((The Consultant will review Federal Emergency Management Agency maps for floodplains in the project vicinity. The project will be designed so there are no effects to a 100-year floodplain. The Consultant shall prepare any Corps of Engineers Section 404 permit applications and shall be responsible for assembling the required data. The responsibility for generation and accuracy of the data is with the technical unit responsible for providing that technical design. The consultant will evaluate the potential presence of wetlands in the project area.))

429 Hazardous Materials Survey

((During the development of final plans, ADOT's Environmental Planning Group will review the plans for undetermined impacts and potential to encounter hazardous materials.))

430 Utilities and Railroad

((The Consultant shall review and update the utility contact list provided in the L/DCR. The Consultant shall schedule monthly coordination meetings with affected utility companies to discuss relocations and/or design considerations. The Consultant shall coordinate with utility companies to obtain as-built information, indicate existing utilities and planned relocations on construction plans, determine and resolve utility conflicts, and prepare utility special provisions and clearance.))

The Consultant shall refer to Section 430 of the Dictionary of Standardized Work Tasks for further information.

440 Roadway Design

((The Consultant shall prepare roadway plans and construction documents for construction of the roadway improvements.))

The Consultant shall refer to Section 440 of the Dictionary of Standardized Work Tasks for further information.

445 Roadway Drainage

((The Consultant shall perform the drainage design for all drainage pipes and structures on the project. The size and location of drainage structures shall be included in the project plans. All design work shall be documented in a Drainage Report.))

446 Roadway Drainage Reports

((The Consultant shall prepare Draft and Final Drainage Reports for the project drainage design, including on-site and off-site analysis. The Drainage Report will include both hydrologic and hydraulic analysis. The Consultant shall distribute the draft report for review and comment. Comments shall be consolidated into a Summary of Comments matrix, including initial and final disposition to comments.))

((The Consultant shall schedule, lead, and document a Comment Resolution meeting. Resolution of comments will be reconciled into a Final Drainage Report. The Consultant shall make use of existing drainage information, to the extent possible, to eliminate rework.))

The Consultant shall refer to Section 446 of the Dictionary of Standardized Work Tasks for further information.

450 Landscape Architectural Practice and Design

((The Consultant shall prepare temporary and permanent erosion control plans, specifications and estimates. ADOT's Roadside Development Section will continue working with Town Engineer Dan McGinn during final design to determine what kind of enhancements can be provided along the improved SR 260. Additional enhancements ADOT will develop are the "gateway" area intersections of SR 260/Finnie Flat Road and SR 260/General Crook Trail, as well as enhancements associated with any turnback agreement negotiated with the Prescott District Engineer. These enhancements include landscaping, visual screening, and architectural treatments. Turnback enhancements will be designed and constructed by a separate contract.))

((The Consultant will be responsible for the landscape design of the "gateway" areas, incorporation of the landscape design at the "gateway" areas into the project plans, and adjusting the earthwork quantities as necessary. The landscape design work shall be done by a registered Landscape Architect. ADOT Roadside Development Section will review the landscape design.))

((The Consultant shall be responsible for the preparation of landscape architectural plans, specifications and cost estimates including landscaping and irrigation plans, site furnishings, and layout plans, temporary and permanent erosion control plans, associated architectural plans, and engineering plans including civil, structural, electrical, mechanical, and plumbing.))

455 Bridge Design

((ADOT Bridge Group will design and prepare construction plans for two bridges; the Camp Verde T.I. Underpass and the Verde River Bridge. The Camp Verde T.I. Underpass currently spans the I-17 freeway

and is structurally deficient. The new bridge will carry six lanes of traffic. Traffic control at I-17 may influence the structure type selection.))

((The Verde River Bridge is anticipated to be a parallel structure to the existing Verde River Bridge, and will be located immediately upstream (north) of the existing structure. Mitigation measures for the southwestern willow flycatcher and the razorback sucker at the Verde River may influence structure type selection. Arch features at the River are the only aspect of the design which must remain the same as on the existing bridge.))

((The Consultant will be responsible for coordination of technical information, and incorporation of plans, estimates, and special provisions into the bid documents.))

460 Traffic Engineering Design

The Consultant shall perform a Traffic Engineering Study in accordance with section 461 of the Dictionary of Standardized Work Tasks and this scope of work. *((The study shall be submitted with the Stage I submittal.))*

461 Traffic Engineering Study

((The Consultant shall provide any necessary traffic data that are not provided by ADOT (Section 740 of the Dictionary of Standardized Work Tasks) including:

- A. Twenty-four hour traffic counts*
- B. Turning movements at intersections (including, but not limited to “gateway” intersections between SR 260/Finnie Flat Road and SR 260/Main Street, the SR 260/Industrial Drive intersection, the new intersection approximately 1150 feet east of the SR 260/Industrial Drive intersection to be constructed by this project, SR 260/General Crook Trail, and SR 260/Oasis Drive.))*

((The Consultant shall prepare a traffic signal warrant analysis for the newly proposed intersection for the collector roadways for the private developer properties, east of Industrial Drive.))

((The Consultant will provide an updated traffic analysis during final design. This analysis will be the basis for determination of lane configuration and geometrics through Camp Verde, and will be used to determine the number of turning lanes to be constructed at each intersection.))

462 Traffic Control Plans

((The consultant shall prepare Phasing and Construction Sequence Report concurrent with the State II submittal. The Phasing and Construction Sequence report shall address items such as construction stage limits, earthwork volumes, mass haul diagrams, construction sequencing, and traffic control. The consultant shall determine the need for traffic control plans and prepare traffic control plans for each phase of construction. Summary quantities shall be included on the traffic control plans.))

The Consultant shall refer to Section 462 of the Dictionary of Standardized Work Tasks for further information.

463 Intersection Lighting and Signalization

((The Consultant shall provide details and construction documents for new signals at the following intersections.

- new Intersection, currently unnamed, on SR 260 1150 feet east of Industrial Drive*
- SR 260/Finnie Flat Road*
- SR 260/Main Street*

ADOT Utility and Railroad Engineering Section will coordinate with the local electric utility to provide electric service. Conduit will be placed at the future SR 260 intersections with General Crook Trail and Oasis Drive, in anticipation that signals will be warranted at those locations in the future.))

((The existing traffic signals at the I-17/SR 260 Traffic Interchange shall be revamped to accommodate the roadway widening to a six lane section across the bridge and a three lane section at the ramp throat. The NB off ramp and traffic signal have been reconstructed by a previous contract, but design modification to this existing ramp or the new bridge location is required since the work was based on a 5 lane section across the bridge. Revamp of the existing traffic signals at Cliff's Parkway/SR 260 intersection and at Montezuma Castle Highway/Main Street intersection signals will not be a part of this project scope of work.))

464 Signing Plans

((The Consultant shall prepare signing plans and a sign summary sheet for the existing and new signing of the roads within the project limits. The Consultant shall work with the Town of Camp Verde during final design to determine the types of signs to be installed at the "gateway" intersections to notify motorists of the downtown Camp Verde amenities. The Consultant shall include the quantities for roadway signing in the project cost estimate and include necessary specifications in the project Special Provisions.))

465 Pavement Marking Plans

((The Consultant shall prepare pavement marking plans for the roadways within the project limits, showing, at a minimum, center, edge and lane line striping, stop lines, crosswalks, arrows, legends, and symbols. The Consultant will include the quantities for pavement markings in the project cost estimate and include necessary specifications in the project Special Provisions.))

467 Composite Traffic Control Device Plan

((The Consultant shall provide a composite plan indicating signing and pavement markings to facilitate review of the controls and devices that will be visible to motorists.))

470 Right-of-Way

((The Consultant shall determine the right-of-way requirements for the project and show these limits on the Stage II plans. Right-of-way requirements shall include new right-of-way, temporary construction easements, drainage easements, and slope easements.))

((The Consultant shall submit to ADOT, in writing, the findings of the Right-of-Way on or before the Stage II (30 % design) submittal. This delineation will constitute the Final Right-of-Way requirements.

No revisions or additions to the R/W requirements will be allowed after the final 30 % submittal without the approval of the Project Manager and the ADOT Right of Way Section. This information will be used by ADOT to initiate the preparation of R/W plans and documents.))

The Consultant shall refer to Section 471 and 472 of the Dictionary of Standardized Work Tasks for further information on Right-of-Way Requirements and Right-of-Way Acquisition.

480 Cost Estimates

((The Consultant shall prepare combined and detailed estimates. Cost estimates shall be provided in both hard copy and input into the ADOT E2C2 system.))

485 Specifications

((The Consultant shall prepare detailed specifications for project components.))

486 Special Provisions

((The Consultant shall prepare draft Special Provisions at the stage III, IV and Final PS&E submittals including items, details, and procedures not adequately covered by ADOT's Standard Specifications and Stored Specifications. The Consultant shall seal the Final Special Provisions.))

487 Contracts and Specification Process

((The Consultant shall provide support to the ADOT Contracts and Specification Group as needed.))

SECTION 600 - POST-DESIGN SERVICES

The Consultant shall provide post-design services as outlined in Section 600 of the Dictionary of Standardized Work Tasks.

SECTION 700 - MATERIAL FURNISHED BY ADOT

750 Environmental Studies

((The Consultant shall request available project related environmental documents. The Consultant shall be responsible for duplication of these reports.))

770 Final Design Concept Report

((The Final Design Concept Report and the Final Conceptual Drainage Report for this project will be provided to the Consultant.))

SECTION 1000 - CONTRACT ADMINISTRATION

The work in this contract shall be administered in accordance with section 1000 of the Dictionary of Standardized Work Tasks. Additional information is provided below.

1027 Site Visit

((The Consultant shall schedule a site visit within thirty working days of the Notice to Proceed.))

1050 Value Analysis

((The Consultant shall participate in a Value Analysis for this project. ADOT will prepare for and lead the Value Analysis sessions.))

1060 Reviews and Submittals

The consultant shall refer to Sections 1060 through 1066 of the Dictionary of Standardized Work Tasks for further information. In addition, *((there will be joint progress meetings with other designers on this corridor. A construction phasing and design impact meeting after submittal of the Stage II documents will be held after the Stage II submittal. A Construction Partnering seminar is also planned for this project.))*

1062 Stage I Design Submittal

((An informal review and discussion of the project shall be held at the Consultant's office prior to the Stage I review submittal.))

1063 Stage II Design Submittal

((Subsequent to submittal of the Stage II documents, a design review meeting may be held at the project site. The Geotechnical Investigation Report shall be submitted by the Consultant a minimum of 15 days

prior to the Stage II Submittal. The remainder of the Stage II submittal shall be in accordance with the Dictionary of Standardized Work Tasks and the ADOT Project Development Manual.))

1064 Stage III Design Submittal

((Subsequent to submittal of the Stage III documents, a design review meeting may be held at the project site.))

1065 Stage IV Design Submittal

As per the Dictionary of Standard Work Tasks. *((The Consultant shall submit the utility clearance letter as part of the Stage IV submittal.))*

1066 Final Submittal

As per the Dictionary of Standard Work Tasks.

**APPENDIX A
LOCATION MAP**

THIS SECTION IS PROJECT SPECIFIC. The Design Project Manager should fill out this section using his/her project information.

RESPONSIBILITY CHART**APPENDIX B**

THIS APPENDIX IS PROJECT SPECIFIC. The Design Project Manager should fill out this section using his/her project information.

{{Identify elements in the table that are part of the project.}} **Page 1 of 4**

		SCOPE			
ITEM		SECTION	CONSULTANT	ADOT	OTHERS
A	LOCATION SURVEYS (complete)	410			
	1. Geodetic Control			X	
	2. Horizontal		X	X	
	3. Vertical		X	X	
	4. Topographic Map			X	
	5. Utility Locations		X		
	6. Right-of-Way		X		
	7. Roadway Cross Sections		X		
	8. Drainage Cross Sections		X		
	9. Structures Surveys	N/A			
B	ENVIRONMENTAL (complete)	420			
	1. Environmental Analysis Document			X	
	2. Air Quality Technical Report			X	
	3. Noise Analysis Technical Report			X	
	4. Cultural Resources Survey			X	
C	MATERIALS DESIGN	416			
	1. Provide Soil Survey		X		
	a. Roadway		X		
	b. Lateral Ditches		X		
	c. Earthwork		X		
	d. Retention/Detention Ponds		X		
	2. Provide Bridge Foundation and Retaining/Sound Wall Foundation Investigations	(N/A)			
	3. Provide Testing and Analysis		X		
	4. Provide Pavement Design			X	
	5. Materials Memorandum			X	
D	TRAFFIC ENGINEERING DESIGN	460			
	1. Gather Statistics	N/A			
	a. 2-Way ADT	N/A			
	b. Turning Movements	N/A			
	c. 24 Hour Traffic Counts	N/A			
	2. Prepare Traffic Data Sheets	N/A			
	3. Prepare Equivalent 18 Kips	N/A			
	4. Prepare Traffic Analysis	N/A			
	5. L.O.S. Analysis	N/A			
	6. Comp. Traffic Control Device Plan		X		

RESPONSIBILITY CHART**APPENDIX B***{{Identify elements in the table that are part of the project.}}* **Page 2 of 4**

	ITEM	SCOPE SECTION	CONSULTANT	ADOT	OTHERS
E	RIGHT-OF-WAY	470			
	1. Develop Requirements		X		
	2. Secure Title Search			X	
	3. Prepare R/W Plans and Legal Descriptions			X	
	4. Prepare Transfer Documents			X	
	5. Provide Appraisals			X	
	6. Negotiate Right-of-Way			X	
	7. Condemnation Proceedings			X	
	8. Testify in Court (by contract modification)		X	X	
	9. R/W Cost Estimates			X	
	10. Relocation Assistance			X	
	11. Property Management			X	
	12. Clearance Letter			X	
F	DESIGN WORK	400			
	1. Plot Design Survey		X		
	2. Roadway Plans & Retaining/Sound Wall Design (only roadway plans)		X		
	3. Drainage Design		X		
	4. Bridge Design			X	
	5. Roadway Lighting Plans	N/A			
	6. Traffic Signal Plans	N/A			
	7. Signing & Pvmnt Marking Plans		X		
	8. Utility Adjustment Plans		X		
	9. Maintenance of Traffic Requirements		X		
	10. Landscape Architectural Design		X		
	11. Architectural Design	N/A			
	12. Plumbing and Mechanical Design	N/A			
	13. Electrical	N/A			
G	SECTION 404	426			
	1. Coordinate with Permitting Agencies		X	X	
	2. Prepare Permit Application		X	X	
	a. Forms			X	
	b. Sketches		X		
	c. Hydraulic Calculations		X		
	d. Supporting Documents		X		
	3. Process Permit Application			X	

RESPONSIBILITY CHART**APPENDIX B***{{Identify elements in the table that are part of the project.}}* **Page 3 of 4**

	ITEM	SCOPE SECTION	CONSULTANT	ADOT	OTHERS
H	UTILITY & RAILROAD	430			
	1. Utilities Conflict Identification		X		
	2. Prior Rights Information			X	
	3. Conduct Utility Pre-Design Conference		X	X	
	4. Review Utility Adjustment Plans		X		
	5. Secure Utility Relocation Schedule		X		
	6. Secure Utility Agreements			X	
	7. Process Relocation Schedule & Agreement			X	
	8. Clearance Letter		X	X	
I	COST ESTIMATES	480			
	1. Prepare Construction Cost Estimates		X		
	2. Prepare R/W Cost Estimates				
J	SPECIAL PROVISIONS	486			
	1. Roadway Construction Plans		X		
	2. Bridge Plans			X	
	3. Signing & Pavement Markings		X		
	4. Traffic Signal Plans		X		
	5. Preparation for pre-bid conference		X		
	6. Attend pre-bid conference		X		
K	CONTRACTS AND SPECIFICATIONS PROCESS	487			
	1. Respond to questions on Final		X		
	2. Final Revisions		X		
	3. Addenda to Final, as required		X		
	4. Preparation for pre-bid conference		X		
	5. Attend pre-bid conference		X		
L	POST DESIGN SERVICES	600			
	1. Respond to questions on project under construction		X		
	2. Review and approve shop drawings		X	X	
	3. Provide contact person		X		
	4. Provide As Built plans requirements		X	X	

RESPONSIBILITY CHART**APPENDIX B***{{Identify elements in the table that are part of the project.}}* **Page 4 of 4**

		SCOPE	CONSULTANT	ADOT	OTHERS
	ITEM	SECTION			
M	VALUE ANALYSIS	1050			
	1. Roadway Construction Plans Review		X	X	X
	2. Bridge Construction Plans Review	N/A			
	3. R/W Plans Review	N/A			
N	REVIEWS AND SUBMITTALS	1060			
	1. Roadway Construction Plans Review		X	X	X
	2. Bridge Construction Plans Review		X	X	
	3. Design Concept Report Submittal	N/A			
	4. Environmental Reports	N/A			
	5. Stage I Design Submittal		X	X	X
	6. Stage II Design Submittal		X	X	X
	7. Stage III Design Submittal		X	X	X
	8. Final Design Submittal		X	X	X

The following is the distribution of reports, plans, estimates and special provisions as specified in Paragraph 1060 of the Scope of Work.

THIS APPENDIX IS PROJECT SPECIFIC. The Design Project Manager should fill out this section using his/her project information.

APPENDIX C DISTRIBUTION LIST

Page 1 of 2

PLANS - SPECIAL PROVISIONS - COST ESTIMATES (Stage I, II, III & IV)

Location	Title	No. of copies
((City of Payson	Engineer))	1
((Gila County	County Engineer))	1
((Tonto Forest	Lands Officer))	1
Bridge Group	Bridge Design Leader	1
Contracts & Specifications	Transportation Engineer	1
District	Development Technician	4
Environmental Planning	Manager	1
FHWA	Area Engineer	1
Materials	Sr. Pavement Design Engineer	1
Materials	Geotechnical Section Engineer	1
Right-of-Way Plans	Manager	1
Roadside Development	Manager	1
((Roadside Development	National Forests Coordinator))	5
Roadway Design Section	Engineer-Manager	1
Roadway Drainage Section	Engineer-Manager	1
Roadway Predesign Section	Engineer-Manager	1
Statewide Project Mgmt Section	Project Manager	1
((Traffic Design	Traffic Engineer))	1
((Traffic Electrical Design	Traffic Engineer))	1
Utilities & Railroad	Engineer-Manager	1

CROSS SECTIONS, if required

District	Development Technician	4
Materials	Geotechnical Section Engineer	1
((Roadside Development	National Forest Coordinator))	3
Roadway Design Section	Engineer-Manager	1
Roadway Predesign Section	Engineer-Manager	1
Statewide Project Mgmt Section	Project Manager	1
Traffic Design	Traffic Engineer	1

AASHTO REPORT, if required

Roadway Group	Assistant State Engineer	2
Statewide Project Mgmt Section	Project Manager	1

APPENDIX C DISTRIBUTION LIST

Page 2 of 2
No. of copies

Location	Title	
DRAINAGE REPORT		
((Bridge Group	Bridge Design Leader))	1
Bridge Group	Bridge Drainage Design Leader	1
District	Development Technician	1
Roadway Drainage Section	Engineer-Manager	1
Roadway Design Section	Engineer-Manager	1
FOUNDATION REPORT, if required		
((Bridge Group	Bridge Design Leader))	2
Materials	Geotechnical Section Engineer	3
GEOTECHNICAL REPORT		
Materials	Sr. Pavement Design Engineer	1
Materials	Geotechnical Section Engineer	3
MATERIALS DESIGN REPORT/PAVEMENT DESIGNS		
Contracts & Specifications	Transportation Engineer	1
District	Development Technician	1
Materials	Sr. Pavement Design Engineer	3
Statewide Project Mgmt Section	Project Manager	1
UTILITY REPORT		
District	Development Technician	1
Utilities & Railroad	Engineer-Manager	1
Statewide Project Mgmt Section	Project Manager	1

APPENDIX D
FINAL COST PROPOSAL

THIS APPENDIX IS PROJECT SPECIFIC. The Design Project Manager should fill out this section using his/her project information.

**APPENDIX E
PAYMENT REPORT**

THIS APPENDIX IS PROJECT SPECIFIC. The Design Project Manager should fill out this section using his/her project information.

APPENDIX F EVALUATION SCHEDULE

PHASING AND EVALUATION SCHEDULE FOR DESIGN PROJECTS

On consultant design contracts, the project design milestones are after the Stage II (30%), Stage III (60%), and Final (100%) design submittals. Contract Constructibility will also be evaluated by District personnel. Evaluations at these milestones provide indications of how the design is progressing and what steps have been taken to assure effective and efficient practices during construction. The evaluations should be completed after all major issues of a design submittal have been resolved. When this schedule is followed the evaluation document is an extension of the design submittal review process.

It is recommended that the letter of transmittal to the design consultant from the Project Manager be similar in content to the attached sample transmittal.

RECOMMENDED EVALUATION FILING DATES

Stage II Design Submittal (30%)	5 DAYS after all major design submittal review issues have been resolved
Stage III Design Submittal (60%)	5 DAYS after all major design submittal review issues have been resolved
Final Design Submittal (100%)	5 DAYS after all major design submittal review issues have been resolved
Contract Constructibility (Partnering Close-out form will be used)	5 DAYS after construction is complete and project has been accepted.

Notes: 1. A design submittal evaluation should not be more than six weeks after the design submittal date.

EVALUATION MEASUREMENTS/COMMENTS

The following measurement standards for performance evaluation factors may be used:

"5" rating is for outstanding performance which exceeds the Scope of Services. Examples are design and/or construction cost savings, substantial time savings, unprecedented level of community involvement, error free plan submittals, etc. The award of this rating will be infrequent, as Consultants are selected on their qualifications and are expected to produce the best product possible.

"3" rating is for performance which has met the Department's expectations based on the Scope of Services. Examples are within scope, budget, and on time; acceptable communication and coordination; minimal changes to plan submittals, etc.

"1" rating is for unsatisfactory performance which has not met the Department's expectations based on the Scope of Services. Examples are not meeting schedules, exceeding the design and/or construction budgets, major revisions required on plan submittals, poor communication and coordination, etc.

NOTE: Additional comments are required in the space provided for the ratings.